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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/541,143

Applicant(s)

GOHARY ET AL.

Examiner

Nathan W. Schlientz

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/02)
Paper No(s)/Mail Date 6/29/05 and 4/13/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of Claims

Claims 13, 19 and 22-24 were amended in a preliminary amendment filed concurrently with the application on 29 June 2005. As a result, claims 1-24 are examined herein on the merits for patentability. No claim is allowed at this time.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte*

Steigewald, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 15 recites the broad recitation alcohols, and the claim also recites "e.g. ethanol" which is the narrower statement of the range/limitation.

2. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, claims 1-10 provide for the use of TBBA or a homologue or a derivative thereof, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-10 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Objections

1. Claims 11, 12, 15 and 22-24 are objected to because of the following informalities: the claims are written in improper Markush format. See MPEP 803.02. The examiner recommends Applicants insert "the group consisting of" after the words "selected from" in each of the claims. Appropriate correction is required.

2. Claim 21 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. Specifically, claim 21 is dependent from claim 11, and states that TBBA, or an homolog or derivative thereof, is the active ingredient. However, claim 11 states that the active ingredient is selected from TBBA and homologues and derivatives thereof. Therefore, claim 21 merely restates what is already stated in claim 11.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

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F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 11, 13-15, 20-22 and 24 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8, 10 and 12 of copending Application No. 10/484,402 (published as US 2004/0266885). Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to a composition comprising a bisphenol A derivative, as well as a method for impregnating wood with said composition. The bisphenol A derivative genus of the two sets of claims are not identical, but have some of the same compounds (i.e. TBBA). Therefore, the scopes of the copending applications are overlapping, and thus they are obvious variants of one another.

It is noted that the recitation of the intended use "fungicidal" within the instant claims has not been given patentable weight to distinguish over the recitation of intended use "insecticidal and termiticidal wood preservative" in '402 because the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967)

and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Since both sets of claims are drawn to compositions that comprise the same ingredients, they would be capable of performing each intended use, as claimed.

With respect to the instant method claims being drawn to preserving wood, while the '402 method claim is drawn to protecting wood against termites, impregnating wood with the same composition would inherently preserve wood and protect it against termites. Both sets of claims comprise the active step of impregnating wood with the composition comprising TBBA. Therefore, both sets of claims inherently preserve the wood and protect it against termites. The examiner respectfully points out the following from MPEP 2112: "The discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer." *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). In *In re Crish*, 393 F.3d 1253, 1258, 73 USPQ2d 1364, 1368 (Fed. Cir. 2004), the court stated that "just as the discovery of properties of a known material does not make it novel, the identification and characterization of a prior art material also does not make it novel."

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 11, 13-15 and 20-24 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication No. 2004/0266885 (Gohary '885).

Gohary '885 discloses a composition comprising a compound of formula (I) in a solvent, such as an organic solvent, aqueous solvent or microemulsion, which is pressure-impregnated into wood (Abstract; [0016]; and claims 1-12). Gohary '885 further discloses examples wherein TBBA, TBBE, TBBZ and TBA in an ethanol solvent at concentrations of 1%, 3%, 5%, 7% and 10% are vacuum impregnated into wood and tested for termite control (Examples 1 and 2). Gohary '885 also discloses an example wherein TBBA, TBBF and TBBS in a NaOH solution are impregnated into wood at concentrations of 1%, 3%, 5%, 7% and 10% and tested for termite control (Example 3).

It is noted that the recitation of the intended use "fungicidal" has not been given patentable weight to distinguish over Gohary '885 because the intended use of the claimed invention must result in a structural difference between the claimed invention

and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Since Gohary '885 discloses compositions that comprise the same ingredients (i.e. TBBA, TBBE, TBBZ, TBBF, TBBS, and TBA in an aqueous solvent, organic solvent or microemulsion), they would be capable of performing the intended fungicidal use, as instantly claimed.

It is also noted that Gohary '885 discloses a method for protecting wood against termites, wherein instant claims 22 and 23 are drawn to a method for preserving wood. However, Gohary '885 discloses the same active steps as instantly claimed: impregnating wood with a solution comprising TBBA or homolog or derivative thereof. Therefore, the method of Gohary '885 would inherently preserve the wood, as instantly claimed. The examiner respectfully points out the following from MPEP 2112: "The discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer." *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). In *In re Crish*, 393 F.3d 1253, 1258, 73 USPQ2d 1364, 1368 (Fed. Cir. 2004), the court stated that "just as the discovery of properties of a known material does

not make it novel, the identification and characterization of a prior art material also does not make it novel.”

The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

2. Claims 11, 13-15 and 20-24 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 03/009981 A1 (Gohary '981).

Gohary '981 discloses a composition comprising a compound of formula (I) in a solvent, such as an organic solvent, aqueous solvent or microemulsion, which is pressure-impregnated into wood (Abstract; pg. 4, ll. 15-22; and claims 1-12). Gohary '981 further discloses examples wherein TBBA, TBBE, TBBZ and TBA in an ethanol solvent at concentrations of 1%, 3%, 5%, 7% and 10% are vacuum impregnated into wood and tested for termite control (Examples 1 and 2). Gohary '981 also discloses an example wherein TBBA, TBBF and TBBS in a NaOH solution are impregnated into wood at concentrations of 1%, 3%, 5%, 7% and 10% and tested for termite control (Example 3).

It is noted that the recitation of the intended use "fungicidal" has not been given patentable weight to distinguish over Gohary '981 because the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Since Gohary '981 discloses compositions that comprise the same ingredients (i.e. TBBA, TBBE, TBBZ, TBBF, TBBS, and TBA in an aqueous solvent, organic solvent or microemulsion), they would be capable of performing the intended fungicidal use, as instantly claimed.

It is also noted that Gohary '981 discloses a method for protecting wood against termites, wherein instant claims 22 and 23 are drawn to a method for preserving wood. However, Gohary '981 discloses the same active steps as instantly claimed: impregnating wood with a solution comprising TBBA or homolog or derivative thereof. Therefore, the method of Gohary '981 would inherently preserve the wood, as instantly claimed. The examiner respectfully points out the following from MPEP 2112: "The discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer." *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433

(CCPA 1977). In *In re Crish*, 393 F.3d 1253, 1258, 73 USPQ2d 1364, 1368 (Fed. Cir. 2004), the court stated that “just as the discovery of properties of a known material does not make it novel, the identification and characterization of a prior art material also does not make it novel.”

The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

3. Claims 11, 14, 15, 17, 20-22 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,074,459 (Stockel).

Stockel discloses a method for preserving wood which comprises contacting the wood with a wood preserving amount of a complex of a cationic biocide and an anionic biocide, wherein the anionic biocide comprises tetrabromobisphenol A (TBBA) (claim 17). Stockel discloses that the complex is preferably dissolved in an aqueous solution to produce an emulsion (col. 1, l. 66 through col. 2, l. 4), wherein a cosolvent of C1-C4 alcohol may be used (col. 6, ll. 9-11), which allows excellent penetration of the wood supra-macro molecular structure (col. 2, ll. 3-4).

4. Claims 11, 14, 15, 20-22 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 61-006769 B4 (Matsushita Electric Works, Ltd.).

Matsushita Electric Works, Ltd. discloses that o-bromophenol, p-bromophenol, and tetrabromobisphenol A (TBBA) are used as mildew proofing agents, wherein dyed veneers are coated with a methanol solution comprising 15% of the active and allowed to stand for 4 weeks without the appearance of mildew (Abstract).

Therefore, Matsushita Electric Works, Ltd. discloses a fungicidal wood preservative composition comprising TBBA as the active solubilized in an alcohol at a concentration of 15%, which is used to preserve wood veneers from fungal damage.

5. Claims 11 and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,165,558 (Schneider).

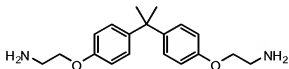
Schneider discloses a process for producing a coating on a heat-sensitive substrate, such as wood, comprising curing with the application of heat and pressure a composition containing a powdered epoxy compound, a powdered aliphatic amine or amino group and customary additives, wherein said powdered epoxy compound is a polyglycidyl ether of tetrabromobisphenol A (claims 1 and 4).

It is noted that Schneider discloses a method for producing a coating on wood, wherein instant claims 22 and 23 are drawn to a method for preserving wood comprising impregnating wood. However, Schneider discloses curing polyglycidyl ether of TBBA on wood with heat and pressure. Therefore, in the absence of evidence to the contrary, the method of Schneider would inherently preserve the wood by impregnating

said wood with the TBBA-containing compound. The examiner respectfully points out the following from MPEP 2112: "The discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer." *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). In *In re Crish*, 393 F.3d 1253, 1258, 73 USPQ2d 1364, 1368 (Fed. Cir. 2004), the court stated that "just as the discovery of properties of a known material does not make it novel, the identification and characterization of a prior art material also does not make it novel."

6. Claims 11, 13, 14, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,195,154 (Kaiser et al.).

Kaiser et al. disclose an aqueous composition comprising a compound of the following formula:



wherein the composition served as an excellent fungicide for Downey mildew on plants at a concentration of 400 ppm (Example 12).

It is noted that Kaiser et al. does not disclose the abovementioned composition as a fungicidal wood preservative composition. However, the recitation of the intended

use "fungicidal wood preservative" has not been given patentable weight to distinguish over Kaiser et al. because the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Since Kaiser et al. disclose compositions that are the same as those claimed, they would be capable of performing the intended use, as claimed.

7. Claims 11-13, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,008,458 (Telschow).

Telschow discloses a composition for the purification of tetrabromobisphenol S (TBBS), wherein the composition comprises TBBS and an organic solvent, such as alkoxy alcohols, aliphatic ketones and aliphatic halogenated hydrocarbons, in a ratio of 1:10 to 1:0.5 (Abstract; col. 1, ll. 11-16 and 56-64; and col. 2, ll. 11-13). Telschow further discloses an example wherein wet (i.e. water) TBBS was mixed with methyl isobutyl ketone to produce a slurry composition (Example 13).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1,148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
1. Claims 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stockel, as applied to claims 11, 14, 15, 17, 20-22 and 24 above, in view of U.S. Patent No. 4,013,728 (Brackenridge) and U.S. Patent No. 6,383,127 (Fushihara et al.).

Applicant claims:

Applicants claim a composition according to claim 11, wherein up to 40 wt.% of the active ingredient is in a solution comprising the addition of water, sodium hydroxide, and sodium dithionite.

Determination of the scope and content of the prior art

(MPEP 2141.01)

Stockel teaches a method for preserving wood which comprises contacting the wood with an aqueous emulsion of TBBA, as discussed above.

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Stockel does not teach the aqueous emulsion composition comprising sodium hydroxide and sodium dithionite, as instantly claimed. However, Brackenridge teaches

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that sodium hydroxide in an aqueous solution of TBBA neutralizes any HBr present in the solution (col. 1, 62 through col. 2, I. 3); and Fushihara et al. teach that sodium dithionite in an aqueous solution of TBBA reduces any bromine in the solution to HBr (col. 10, II. 37-55).

Finding of *prima facie* obviousness

Rational and Motivation (MPEP 2142-43)

Therefore, it would have been *prima facie* obvious for one skilled in the art at the time of the invention to incorporate sodium hydroxide and sodium dithionite in the aqueous emulsion composition of Stockel in order to reduce bromine to HBr and neutralize the HBr, as reasonably taught by Brackenridge and Fushihara et al.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

2. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stockel, as applied to claims 11, 14, 15, 17, 20-22 and 24 above, in view of U.S. Patent Application Publication No. 2006/0199736 (Vasek) and U.S. Patent No. 7,264,886 (Cui et al.).

Applicant claims:

Applicants claim a composition comprising TBBA, a homolog, or derivative thereof in an aqueous emulsion comprising butyl lactate and NP-15 (nonylphenol ethoxylate)

Determination of the scope and content of the prior art

(MPEP 2141.01)

Stockel teaches a method for preserving wood which comprises contacting the wood with an aqueous emulsion of TBBA, as discussed above.

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Stockel does not teach the aqueous emulsion of TBBA to further comprise butyl lactate and NP-15, as instantly claimed. However, Vasek teaches environmentally benign formulations comprising emulsions (claim 11) of active agents used in wood preservation ([0045]), wherein butyl lactate is desirably used because it is listed by the EPA as inert ([0026]). Also, Cui et al. teach wood preservatives added to emulsions (col. 5, ll. 15-18), wherein emulsions comprising ethoxylated nonylphenols had increased stability as the HLB values increased (col. 4, ll. 8-17). Cui et al. further teaches examples wherein NP-15 is used in the formation of emulsions (Examples 1 and 2).

Finding of *prima facie* obviousness

Rational and Motivation (MPEP 2142-43)

Therefore, it would have been *prima facie* obvious for one skilled in the art at the time of the invention to use butyl lactate and NP-15 in the TBBA-containing emulsions of Stockel because butyl lactate is environmentally inert when used with wood preservative emulsions, as reasonably taught by Vasek, and NP-15 is desirable for increasing the stability of emulsions which are combined with wood preservative actives, as reasonably taught by Cui et al.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan W. Schlientz whose telephone number is 571-272-9924. The examiner can normally be reached on 8:30 AM to 5:00 PM, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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NWS

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